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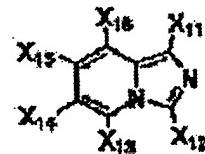
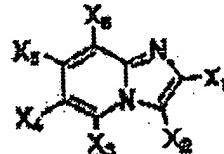
(21)Application number : 11-206147
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(54) ORGANIC ELECTROLUMINESCENCE ELEMENT

(57)Abstract:

PROBLEM TO BE SOLVED: To enhance stability, durability, and luminescent brightness by interposing at least one layer of layers containing at least one of azaindolizine derivatives between a pair of electrodes.

SOLUTION: As azaindolizine derivatives prepared by substituting one carbon atom in an indolizine skeleton with a nitrogen atom, a compound having 1- or 2-azaindolizine skeleton represented by formulas I, II are suitable. Preferably, the derivative is contained in a hole injection transport layer or a luminescent layer, and contains at least one of a luminescent organic metal complexes and triarylamine derivatives, and an electron injection transport layer may be interposed between electrodes. For example, when the hole injection transport layer is contained, at a voltage of 6.3–6.7 V, green light having an initial brightness of 450–500 Cd/m² and a half life of 500–620 hours are realized. In the formulas I and II, X₁–X₁₆ represent hydrogen, halogen, a straight chain, branched, or cyclic alkyl group or alkoxy group, a substituted or non-substituted aralkyl group, aryl group, aralkyloxy group, or aryloxy group.



LEGAL STATUS

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